

# DEVELOPING THE BIG SANDY LITHIUM PROJECT ARIZONA, USA



**HAWKSTONE**  
MINING

**ASX:HWK**

INVESTOR PRESENTATION  
MAY 2021

DAWN OF A NEW ENERGY ERA

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## COMPETENT PERSON STATEMENT

The information in this report regarding exploration results, exploration targets and the mineral resources is based on and fairly represents information compiled by Mr Gregory Smith, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Smith has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements and that the material assumptions and technical parameters underpinning the Resource estimate continue to apply.

# OVERVIEW

## CORPORATE SNAPSHOT



Hawkstone Share Price <sup>(2)</sup>	Issued Shares <sup>(1)</sup>	Market Cap	Cash Balance <sup>(2)</sup>
A\$0.041	1,614m	\$66.2m	\$5.0m

### BIG SANDY LITHIUM

Location	Arizona
Landholding Ownership (10 square miles)	100%
Resource (tons)	32.5 million
Average Grade	1,850ppm
Contained Lithium (tons) <sup>(3)</sup>	320,800
Lithium Carbonate Purity Produced <sup>(4)</sup>	99.8%
% Exploration of Landholding	4%
Exploration Target Range	271 million tons – 483 million tons (at 1,000-2,000ppm Li)*

\* Note that the potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain whether future exploration will result in the definition of a mineral resource



1. As per the Quarterly Report released to the ASX for the period ending 31/12/2020. 2. As of 23/04/2021. 3. Lithium Carbonate Equivalent (LCE). 4. ASX Announcement 24/03/2021: Battery Grade Lithium Carbonate Produced.

# AN EXPERIENCED TEAM WITH A PROVEN TRACK RECORD

## THE TEAM



**PAUL LLOYD** – Managing Director

Paul is a Chartered Accountant with over 30 years' commercial experience and operates his own corporate consulting business, specialising in the area of corporate, financial and management advisory services. After commencing his career with an international accounting firm, he was employed for approximately 10 years as the General Manager of Finance for a Western Australian based international drilling contractor working extensively in Asia and Africa. Paul floated Beacon Minerals Ltd on the ASX in 2006 and has been responsible for a number of IPOs, RTOs, project acquisitions and capital raisings for ASX listed public companies.



**BARNABY EGERTON-WARBURTON** – Non-Executive Chairman

Barnaby has over 20 years of trading, investment banking, international investment and market experience with positions at JP Morgan, BNP Equities (New York) and Prudential Securities (New York). He is an experienced investment banker and corporate advisor, having held managing director and non-executive director positions in the investment banking, oil & gas and resource sectors. He holds a degree in economics, is a graduate of the Australian Institute of Company Directors, and a member of the American Association of Petroleum Geologists.



**GREG SMITH** – Non-Executive Director

Greg commenced his career in 1975 and has worked over a wide cross section of minerals and countries including in North America, Australia, Asia and throughout Africa. He was the exploration manager for Moto Gold Mines Ltd, responsible for the discovery of 22.5 million ounces of gold in the Democratic Republic of Congo (Kibali Mine). Recently he planned and supervised the drill-out of the maiden resource on the Big Sandy Lithium Project. He is a Member of the Australasian Institute of Mining and Metallurgy.



**DOUG PITTS** – US General Manager

Doug is currently CEO of AltTech/Pitts and Pitts and Associates, and since 2016 he has been an Adjunct Professor for the Entrepreneurship Program at Grand Canyon University. He was formerly CEO of Frontier Applied Sciences, Chief Industrial Officer for AREVA Solar, President of Parsons Latin America, Vice President of Bechtel Group, Executive Vice President of Molten Metal Technology, Project Manager with Asarco, Inc./Mt. Isa Mines Ltd., and a research engineer with Hazen Research. He holds a Professional Science Masters degree in chemical and metallurgical engineering from the Colorado School of Mines and an MBA from Golden Gate University.

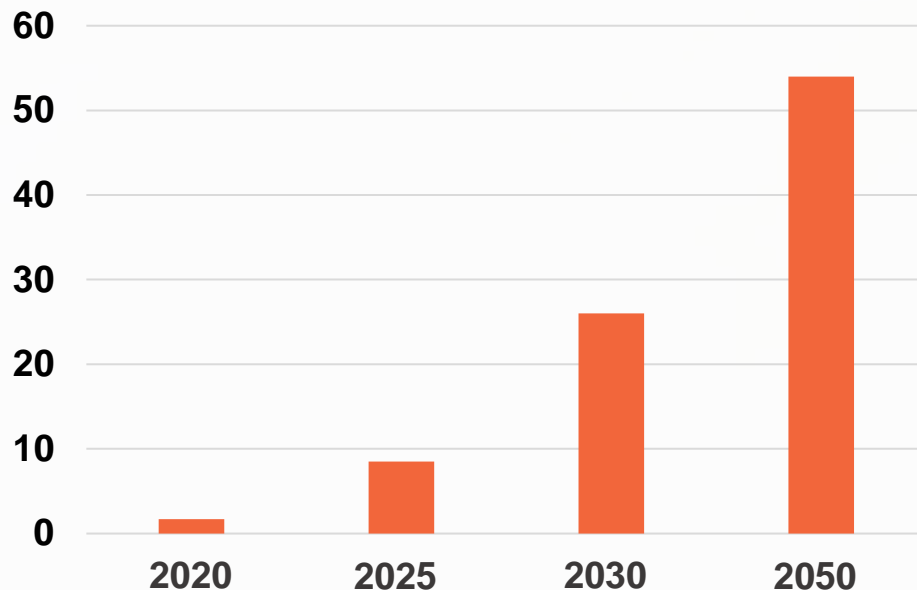
# THE ELECTRIC VEHICLE MARKET

RAPIDLY GROWING DEMAND DRIVEN BY THE ENERGY TRANSITION

## 500 EV MODELS Globally by 2022

Automakers are accelerating their EV launch plans, partly to comply with increasingly stringent regulations in Europe and China.

EV Sales Forecast



**"We will not stop  
until every car on  
the road is electric"**

Elon Musk  
CEO & Co-Founder  
Tesla, Inc.

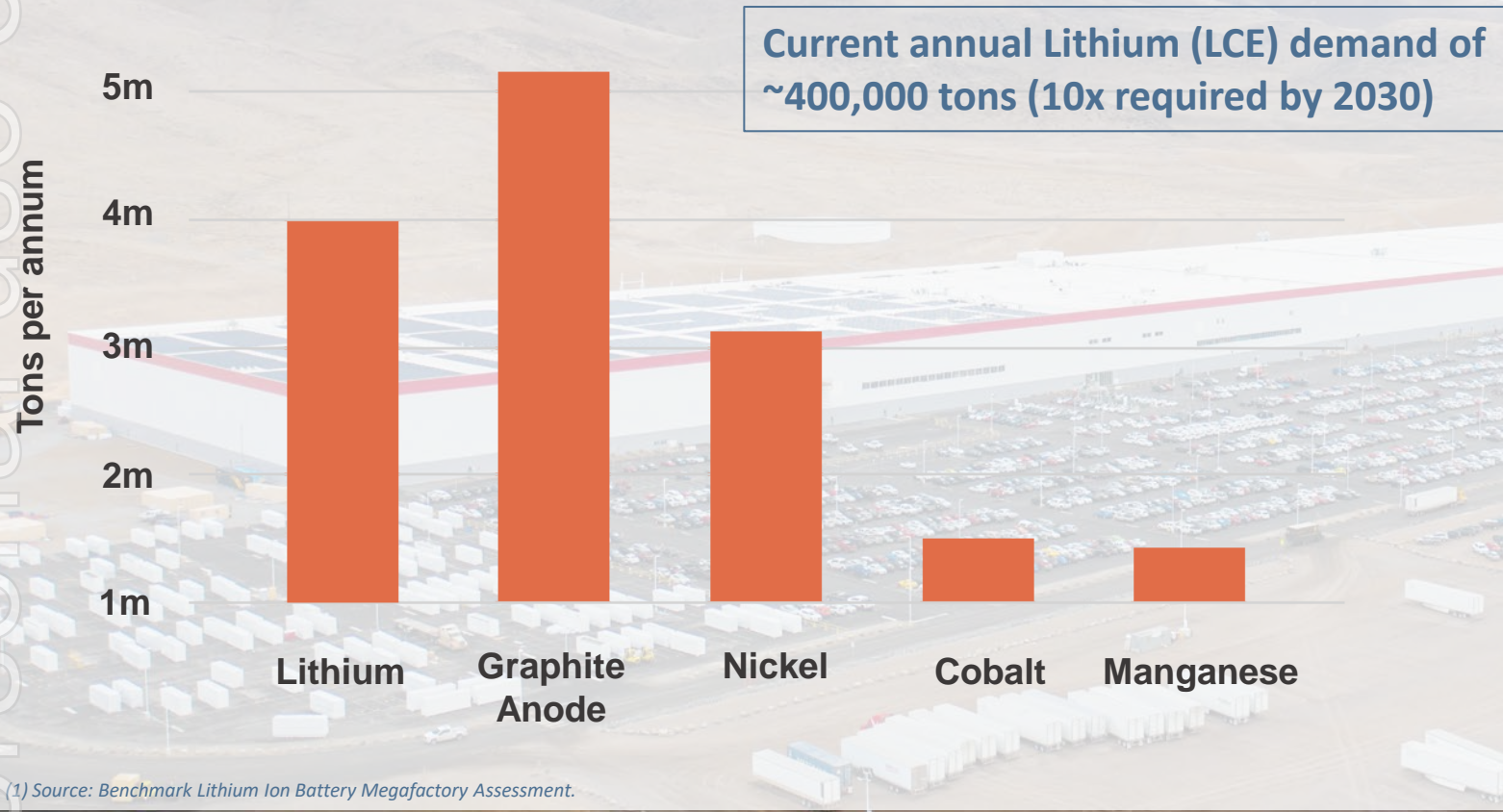
# THE LITHIUM MARKET

## FUTURE MATERIAL DEMAND



### An Additional 200 GIGAFACTORIES (BY 2030)

Impact on raw material demand:



(1) Source: Benchmark Lithium Ion Battery Megafactory Assessment.



# BIG SANDY PROJECT

## DEVELOPING A LOW-COST LITHIUM PROJECT

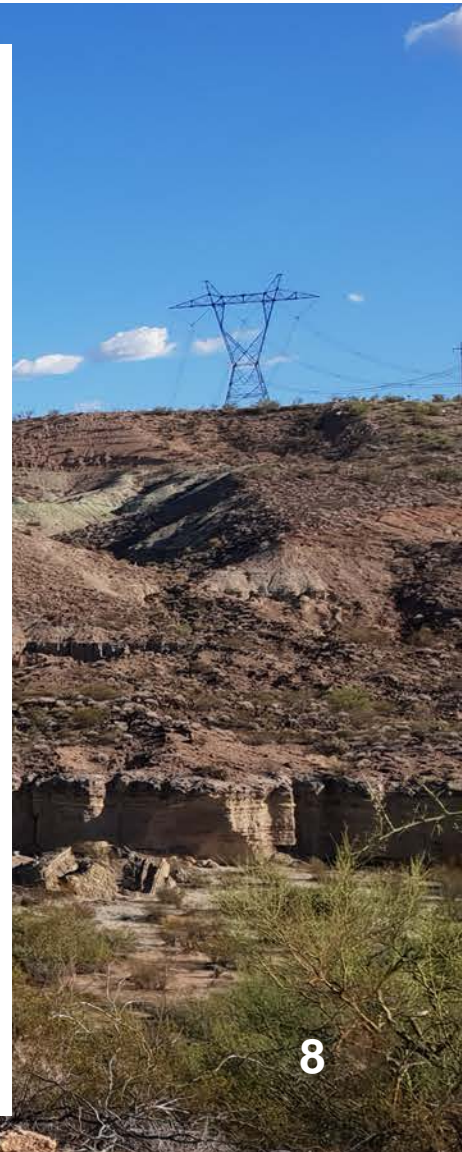
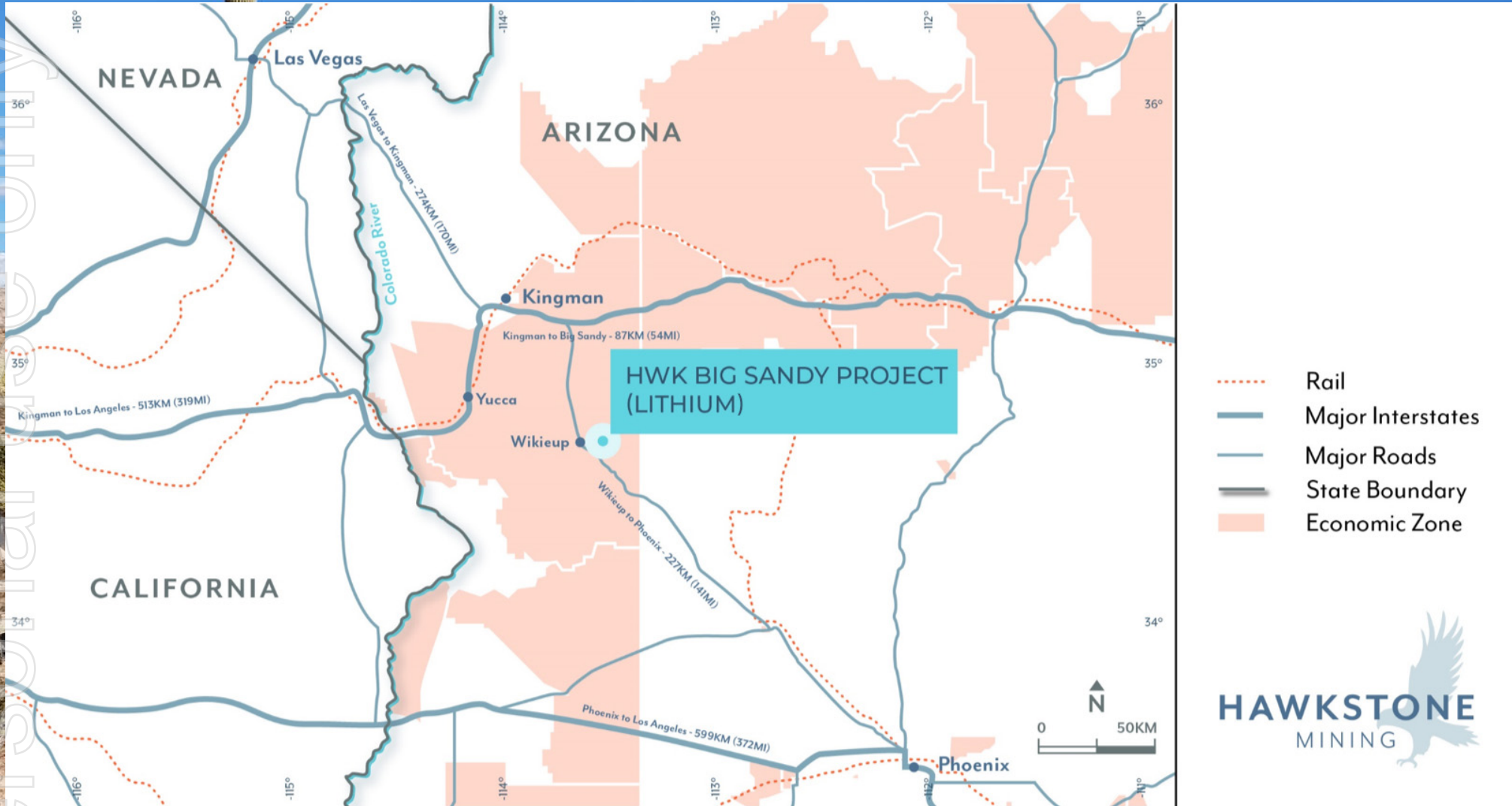
- Initial resource of **320,800 tons** of LCE from 4% of the 100% owned landholding in Arizona, in close proximity to industrial processing locations
- Resource estimate includes 12.7Mt grading 2,360ppm Li above a cutoff of 2,000ppm (49% of the contained LCE)
- Battery grade Lithium carbonate prices have increased 88.4% year-to-date to **\$12,625 per ton**<sup>(2)</sup>
- Production of high quality battery grade Lithium Carbonate of **99.8% purity** (Battery Grade >99.5% purity)
- Superior infrastructure located just off Highway I93 connecting interstate routes crossing the USA
- Very large exploration target up to **483 million tons** of sedimentary material (drilling to commence in Q2 2021)<sup>(3)</sup>
- Arizona is a fast-growing mining friendly state (world's 4th largest copper producer) open to development and willing to provide incentives
- Arizona was ranked number two in the recent Fraser Institutes Mining Survey<sup>(4)</sup>.
- Manufacturer/energy storage producers located or in development in Arizona, Nevada, Texas and Tennessee
- Lithium became a **US strategic mineral** in 2018 with recently introduced Federal permitting incentives.



(1) ASX Announcement 24/03/2021: Battery Grade Lithium Carbonate Produced. (2) Benchmark Lithium Price Assessment – February Update. (3) ASX Announcement 7/11/2019, Big Sandy Lithium – Exploration Target Update. Note that the potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain whether future exploration will result in the definition of a mineral resource. (4) <https://www.fraserinstitute.org/categories/mining>.

# REGIONAL INFRASTRUCTURE

WORLD CLASS INFRASTRUCTURE ON OUR DOOR STEP





# WHY SEDIMENTARY LITHIUM

## BENDING THE LITHIUM COST CURVE

### Industry leading sedimentary Lithium peer advantages

- Open pit, low-cost mining
- Low stripping ratio
- Minimal requirement for crushing / grinding
- Scale to support long mine life

### LITHIUM DEPOSIT TYPES

	Estimated Cash Costs (Li <sub>2</sub> CO <sub>3</sub> )	Mine Product	Typical Grade	Production Steps
<b>SEDIMENTARY</b>	~ \$4,000 / tonne	Lithium Carbonate/Hydroxide	1,000-3,000 ppm Li	Mining Acid Leaching Evaporation Crystallization
<b>BRINE</b>	\$2,500 - \$4,000/ tonne	Lithium Carbonate (Li <sub>2</sub> CO <sub>3</sub> )	500-1,000 ppm Li	Pumping of Brine Evaporation Crystallization
<b>HARDROCK</b>	\$6,000 / tonne	Spodumene Concentrate (6% Li <sub>2</sub> O)	4,500-7,000 ppm Li	Mining Crushing and Grinding Roasting Acidification

# PROVEN LITHIUM EXTRACTION METHOD

## INITIAL TESTING - HIGH RECOVERY

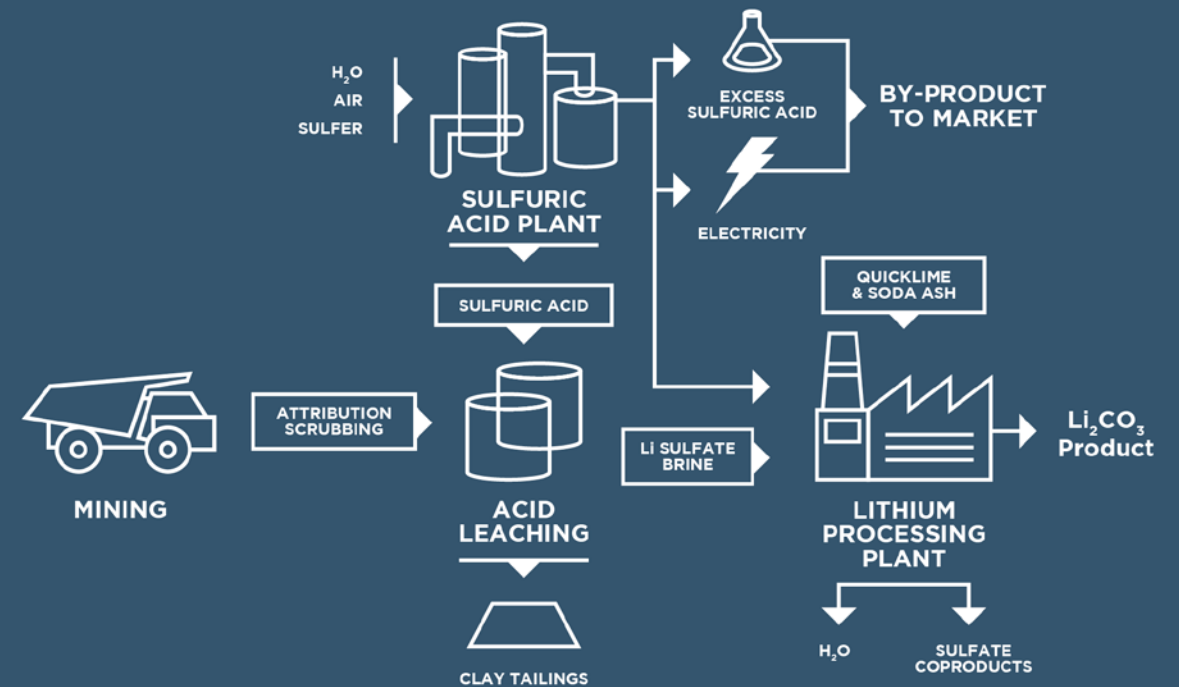
### Initial metallurgical test work

- Amenable to sulfuric acid lithium extraction
- Lithium recovery rate of >90%
- Technology partners have completed similar test work on peer projects

### Future Lithium Processing Plant

- Decision to mine includes a lithium plant
- First-class infrastructure (roads, power, labour)
- Highly-skilled technology partners

### TRADITIONAL LITHIUM EXTRACTION PROCESS



# PRODUCTS PRODUCED FROM BIG SANDY ORE

## INITIAL TESTING – HIGH RECOVERY AND BATTERY GRADE PRODUCTS

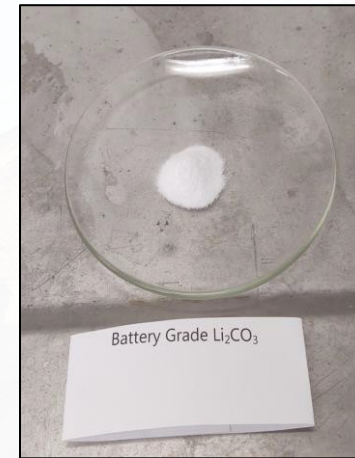
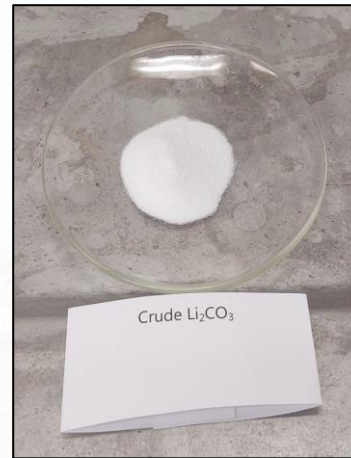
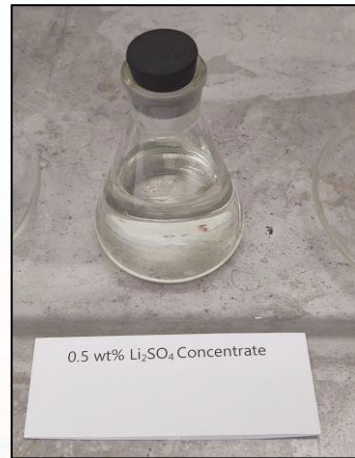
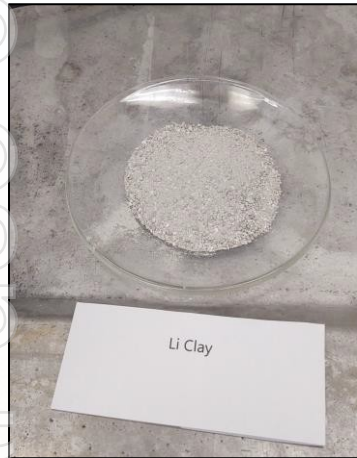
### Four Process Sections:

(1) Big Sandy Ore (0.25% Li)

(2) Leach Solution (91% Li)

(3) Tech Grade (99.6%)  $\text{Li}_2\text{CO}_3$

(4) Battery Grade (99.8%)  $\text{Li}_2\text{CO}_3$



# PLANNED KINGMAN PILOT PLANT

CONSTRUCTION IN H2 2021

- Pilot plant to be designed by Hazen Research and located in Kingman near potential sites for a commercial plant
- Plant will be designed for an operating life of one year, giving it the ability to test other ore bodies in the 10 square mile landholding
- Water and power requirements will be low and will require normal servicing (no secondary treatment or high voltage)
  - Other than power / water, the plant will be self contained
- Ore will be shipped to Kingman location by truck (50 miles) on US 93/I-40 and stored in bins with loading / leach feed capabilities
- Waste material will be stored for later disposal at the full plant
- Analysis to be done on site and at local laboratories



Existing Hazen Research Pilot Plant that the Big Sandy Pilot Plant will be based on

# BIG SANDY LITHIUM PROJECT

## PEER ANALYSIS



- As milestones are achieved at Big Sandy, we believe investors will begin to ascribe value



Size & Scale			
Company Ticker	HWK:ASX	CYP:TSX	INR:ASX
Market Cap (A\$m)( <sup>2</sup> )	\$67.1m	\$140.7m	\$682.7m
US Lithium Assets	100% Ownership of Big Sandy (Arizona)	100% Ownership of Clayton Valley Lithium Project (Nevada)	100% Ownership of Rhyolite Ridge (Nevada)
Mineral Resource – million tons( <sup>3</sup> )	32.5Mt	1,030Mt	146.5Mt
Mineral Resource – grade( <sup>3</sup> )	1,850ppm	1,055ppm	1,600ppm
Mineral Resource – LCE (kt)( <sup>3</sup> )	320.8kt	1,086Mt	1,250ktTotal
Total Reserves – tons( <sup>3</sup> )	-	222.8Mt	60Mt
Li <sub>2</sub> CO <sub>3</sub> purity achieved	99.8%	>99%	>99%
Milestones			
Strong leadership team	✓	✓	✓
Proven US Mineral Resource	✓	✓	✓
Proven Battery Grade capability	✓	✓	✓
PFS completion	⊖	✓	✓
Offtake agreements signed	⊖	⊖	✓
DFS completed	⊖	⊖	✓
Project financing secured	⊖	⊖	⊖

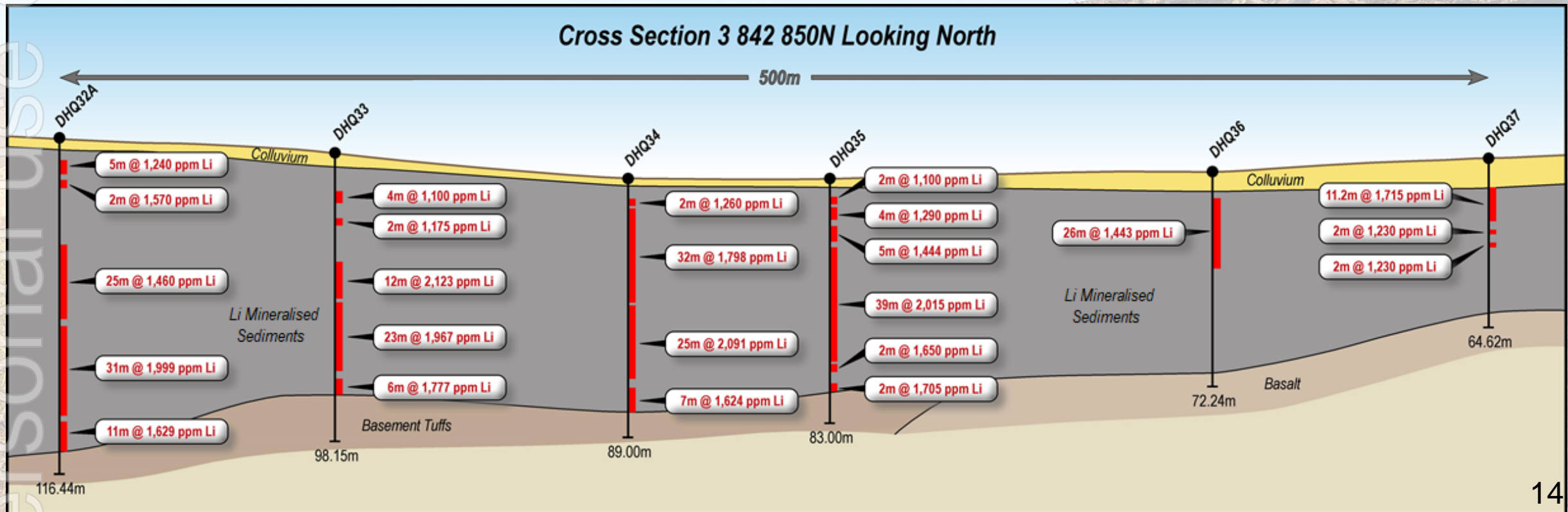
Notes: (1) All data from publicly available filings (2) Market capitalization data based on share prices from the ASX/TSX on April 23, 2021: HWK=\$0.041AUD, INR=\$0.36AUD and CYP=\$1.13CAD with AUD:CAD=0.9641. (3) A breakdown of the Mineral Resource estimates is given in the Appendix.

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# BIG SANDY LITHIUM PROJECT

## GEOLOGY

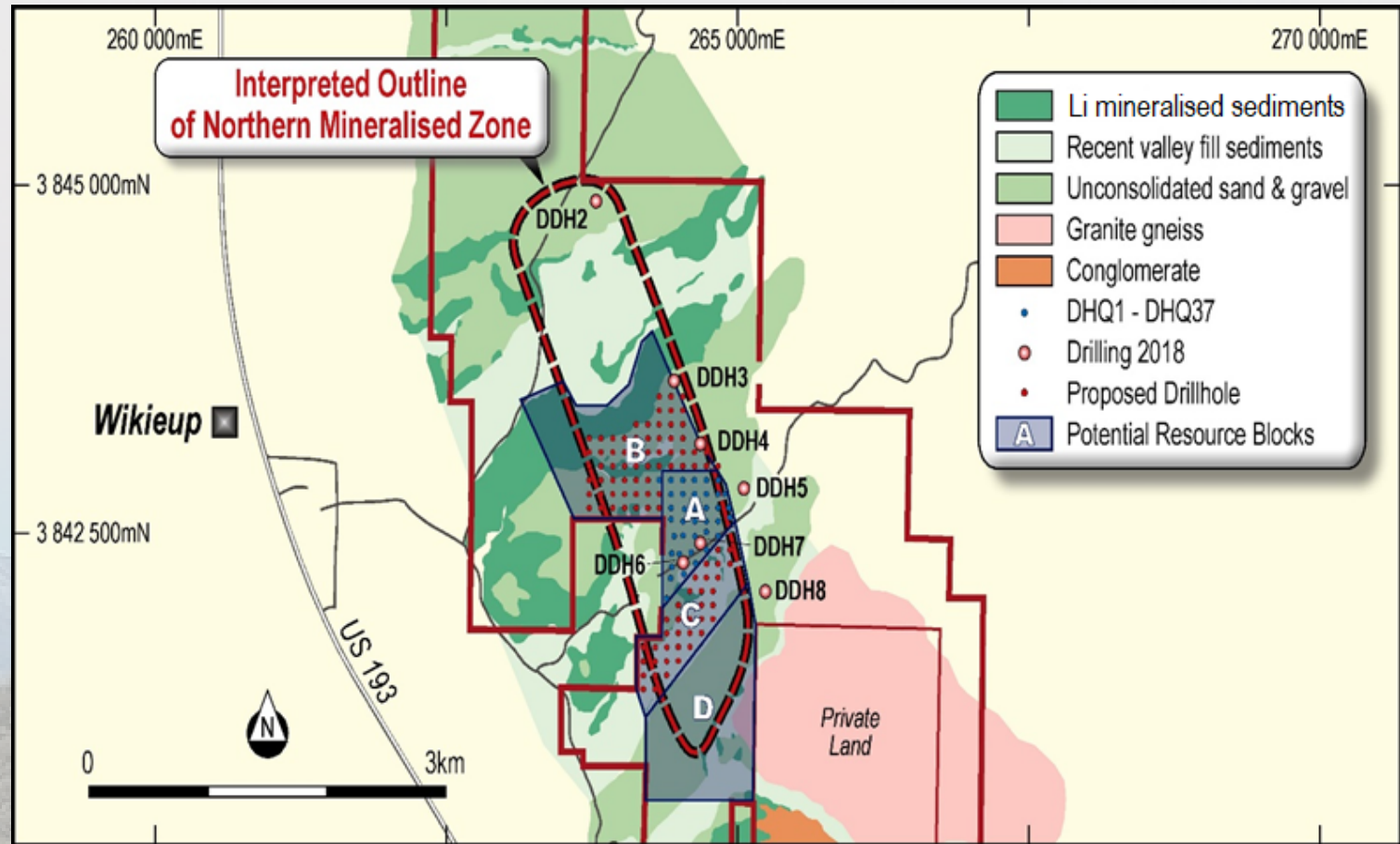
- Lithium mineralisation hosted by sediments deposited in a N-S oriented basin.
- Lithium mineralised sediments, up to 50m in thickness are covered by a thin veneer of transported colluvium (5-10m thick).



# BIG SANDY LITHIUM PROJECT

## EXPLORATION TARGET

- **Total exploration target** for the Northern and Southern Mineralised Zones is estimated at **between 271Mt – 483Mt of sedimentary material grading between 1,000 and 2,000 ppm Li<sup>(1)</sup>**.



\* Note that the potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain whether future exploration will result in the definition of a mineral resource

Resource Drilling in Blue (Block A) and Planned Holes in Red Blocks B & C, Northern Mineralised Zone

# NEWSFLOW CATALYSTS

## NEXT STEPS FOR CY2021



### BIG SANDY SEDIMENTARY LITHIUM PROJECT

Bench Scale Testing	Q2 2021
Exploration Drilling to Commence	Q2 2021
Trading of Hawkstone shares on the OTC exchange based in NYC	Q2 2021
Pilot Plant Design and Construction	H2 2021
Pilot Plant Demonstration	H2 2021
Appointment of US based Directors	H2 2021
Commence Feasibility Study	H1 2022
Updated JORC Resource based on additional drilling	H1 2022
Commence discussions with offtake partners	H1 2022







**HAWKSTONE**  
MINING

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# APPENDIX

## MINERAL RESOURCE SUMMARY

Resource Classification	Tonnes (Mt)	Li Grade (ppm)	Contained Li Metal (t)	Contained LCE (kt)
<b>Hawkstone Resources (HWK)<sup>(1)</sup></b>				
<i>Indicated Resource</i>	14.6	1,940	28,400	151
<i>Inferred Resource</i>	17.9	1,780	31,900	170
<b>Total Resource</b>	<b>32.5</b>	<b>1,850</b>	<b>60,300</b>	<b>320.8</b>
<b>Cypress Development Corp (CYP)<sup>(2)</sup></b>				
<i>Measured Resource</i>	574.1	1,081	620,602	3,303
<i>Indicated Resource</i>	355.6	1,032	366,979	1,953
<i>Inferred Resource</i>	100.4	986	98,994	527
<b>Total Resource<sup>(4)</sup></b>	<b>1,030</b>	<b>1,055</b>	<b>1,086,576</b>	<b>5,784</b>
<i>Probable Reserves</i>	<b>222.8</b>	<b>1,141</b>	<b>254,215</b>	<b>1,353</b>
<b>loneer (INR)<sup>(3)</sup></b>				
<i>Measured Resource</i>	39	1,700	66,300	360
<i>Indicated Resource</i>	88	1,550	136,400	730
<i>Inferred Resource</i>	19.5	1,600	31,200	170
<b>Total Resource<sup>(4)</sup></b>	<b>146.5</b>	<b>1,600</b>	<b>233,900</b>	<b>1,250</b>
<i>Proved Reserve</i>	29	1,900	55,100	290
<i>Probable Reserve</i>	31.5	1,700	53,550	280
<b>Total Reserve</b>	<b>60.0</b>	<b>1,800</b>	<b>108,650</b>	<b>580</b>

(1) See Hawkstone's latest resource update in announcement "Big Sandy Lithium Project (Arizona, USA) Maiden Mineral Resource" – 26 September 2019. (2) See Cypress Development Corporation's latest resource change in announcement "Cypress Development Announces 55% Increase in Lithium Mineral Resource at the Clayton Valley Lithium Project, Nevada" – August 11, 2020. (3) See loneer's latest resource change in announcement "Rhyolite Ridge Ore Reserve Increased 280% to 60 million tonnes" – 30 April 2020. The table includes loneer's lithium resource and excludes loneer's boron resource. (4) CYP and INR Total Resource numbers are inclusive of Total Reserves.